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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,737	06/19/2002	Albert Mau	Q69176	4585

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EXAMINER

TENTONI, LEO B

ART UNIT PAPER NUMBER

1732

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,737

Applicant(s)

MAU ET AL.

Examiner

Leo B. Tentoni

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06192002;08202002.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1732, Examiner Leo Tentoni.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. Applicant is requested to submit a copy of the Australian reference, as such is not presently in the instant application file.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: : PROCESS OF MAKING
ALIGNED CARBON NANOTUBES.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point

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out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, ``or'' should be - - and - - (the synthesizing step is required for the formation of aligned carbon nanotubes).

Claim 3 contains a trademark (or trade name), which renders the claim indefinite.

In claim 15, line 3, it is not clear why there is a parenthesis at the end of this line, as it appears that there may be one or more words missing from the claim.

In claim 20, lines 3-4, ``said mold'' does not have clear and proper antecedent basis in the claims.

In claim 24, line 2, the phrase - - the group consisting of - - should be inserted after ``from'' (for proper Markush format).

In claim 25, line 2, the phrase - - the group consisting of - - should be inserted after ``from'' (for proper Markush format).

In claim 29, line 2 and in claim 38, line 3, ``or'' should be - - and - - (for proper Markush format).

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 41-43 are rejected under 35 U.S.C. 102(e) as being anticipated by either Chuang et al (U.S. Patent 6,062,931), Nakamoto (U.S. Patent 6,097,138) or Den et al (U.S. Patent 6,628,053).

Chuang et al (see the entire document, in particular, col. 3, line 38 to col. 4, line 36; Figure 6), Nakamoto (see the entire document, in particular, col. 6, line 64 to col. 7, line 45; col. 11, line 27 to col. 12, line 20) and Den et al (see the entire document, in particular, col. 7, line 33 to col. 8, line 69) teach a patterned carbon nanotube film (and devices therefor) as set forth in the instant claims. Note that the carbonized polymer is not part of the nanotube film (the carbon nanotubes are not attached to the carbonized polymer; note also instant claims 35-37).

Allowable Subject Matter

9. Claims 1-40 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

10. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art references

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presently of record, alone or in combination, disclose, suggest or teach a process of making aligned carbon nanotubes including carbonizing polymer on the surface of a substrate in a pattern and synthesizing aligned carbon nanotubes on regions of the substrate on which carbonized polymer is not attached as set forth in instant independent claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael P. Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Leo B. Tentoni

Leo B. Tentoni
Primary Examiner
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lbt